

REMARKS

The present communication responds to the Office Action dated January 19, 2007. The Applicants thank the Examiner and his supervisor, Glenn Caldarola, for the interview of April 13, 2007. The Applicants affirm the election to prosecute the invention of claims 37-62. In the present Office Action, the Examiner has rejected claims 37-62. In view of the following remarks, the Applicants respectfully request reconsideration and allowance of the pending claims.

Rejection under 35 U.S.C. § 103

Claims 37-62 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Tarman (U.S. Patent 4,289,625).

Claim 37 is not Obvious Over Tarman

Claim 37, as amended, is directed to a process for breaking down macromolecular bonds within an organic material comprising, in part, “heating the thermobaric cracking chamber to a temperature of from about 350 degrees to about 600 degrees F and pressurizing the thermobaric cracking chamber to a pressure of from about 400 to about 1,200 psig to convert the bio-softened slurry into a superheated slurry,” and “releasing the superheated slurry into an expansion/separation tank for phase separation of the superheated slurry.”

Tarman does not disclose, teach, or suggest “heating [a] thermobaric cracking chamber to a temperature of from about 350 degrees to about 600 degrees F” or “releasing [a] superheated slurry into an expansion/separation tank for phase separation of the superheated slurry.” Tarman discloses a bio-thermal gasification process which includes passing product biological residue of a biological digester through a dewatering process. *Tarman*, col. 5, ll. 16-19, 22-25. The dewatered biological residue is then fed into a thermal gasifier operating at temperatures of about 1200 degrees to about 1800 degrees F. *Tarman*, col. 5, ll. 22-37. Product gases of the thermal gasifier are released and further processed for removal of hydrocarbons and sulfur containing compounds by liquid recovery means and purification means. *Tarman*, col. 5, ll. 3-11. The remaining thermal gasifier product, the thermal residue, is returned to the biological digester to provide inorganic nutrients. *Tarman*, col. 2, ll. 23-26.

At least because Tarman does not disclose, teach, or suggest “heating [a] thermobaric cracking chamber to a temperature of from about 350 degrees to about 600 degrees F” or “releasing [a] superheated slurry into an expansion/separation tank for phase separation of the superheated slurry,” the Applicants thus respectfully submit that Tarman does not make obvious the invention of claim 37. Reconsideration and withdrawal of the rejection is respectfully requested.

Claims Depending From Claim 37 Are Patentable

Because claims 38-62 depend directly or indirectly from claim 37 and incorporate all the limitations of claim 37, the Applicants respectfully submit that claims 38-62 are patentable at least for the reasons discussed with respect to claim 37. Reconsideration and withdrawal of the rejections are respectfully requested.

CONCLUSION

In light of the above, it is respectfully submitted that the present application is in condition for allowance. Reconsideration of the present application and a favorable response are respectfully requested.

No claim fees should be generated by this paper. However, the Commissioner is hereby authorized to charge any fee deficiency associated with this paper to Deposit Account No. 04-1420.

Respectfully submitted,

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Date: April 18, 2007

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